

INJURY PREVENTION



“PREVENTION IS THE
VACCINE FOR THE DISEASE
OF INJURY.”

PURPOSE

- DETAIL THE IMPACT OF INJURY ON THE STATE OF MONTANA
- IDENTIFY CONTROL STRATEGIES
- DETAIL INJURY PREVENTION PRINCIPLES
- DISCUSS COMPONENTS OF EFFECTIVE INJURY PREVENTION PROGRAM

OBJECTIVES

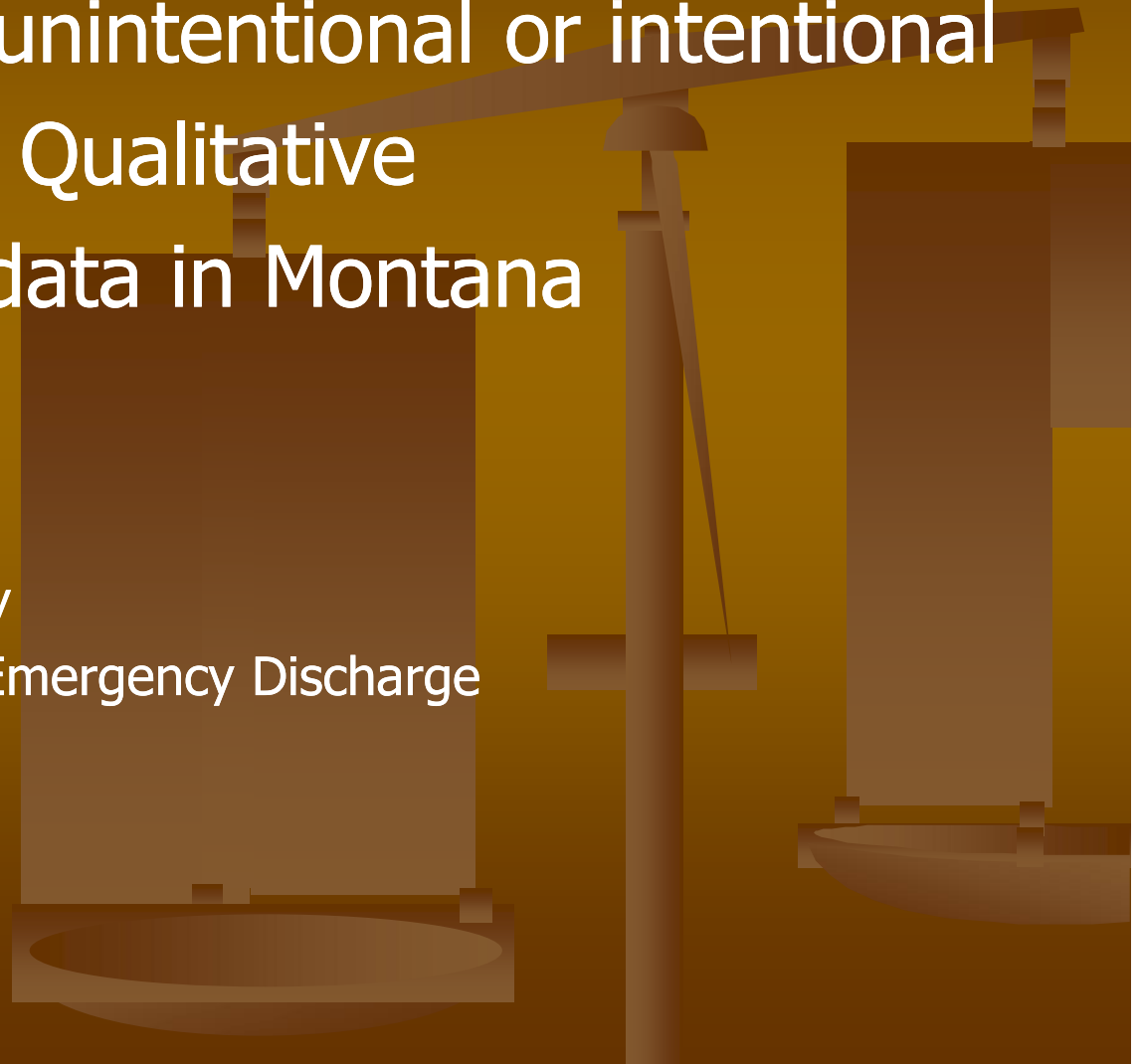
- Describe the factors associated with each event of an injury for problem identification
- List three strategies for communicating your injury prevention message to the community
- Identify one way that you can participate in injury prevention

DEFINITIONS

- INJURY IS PHYSICAL DAMAGE FROM THE TRANSFER OF ENERGY
- PREVENTION IS THE ACT OF PREVENTING OR IMPEDING.
- ACCIDENT IS AN UNEXPECTED and UNDESIRABLE EVENT WHICH HAPPENS BY CHANCE.
 - MAYBE A BETTER DEFINITION IS THAT ACCIDENTS RESULT BECAUSE OF A RISK THAT IS POORLY MANAGED.

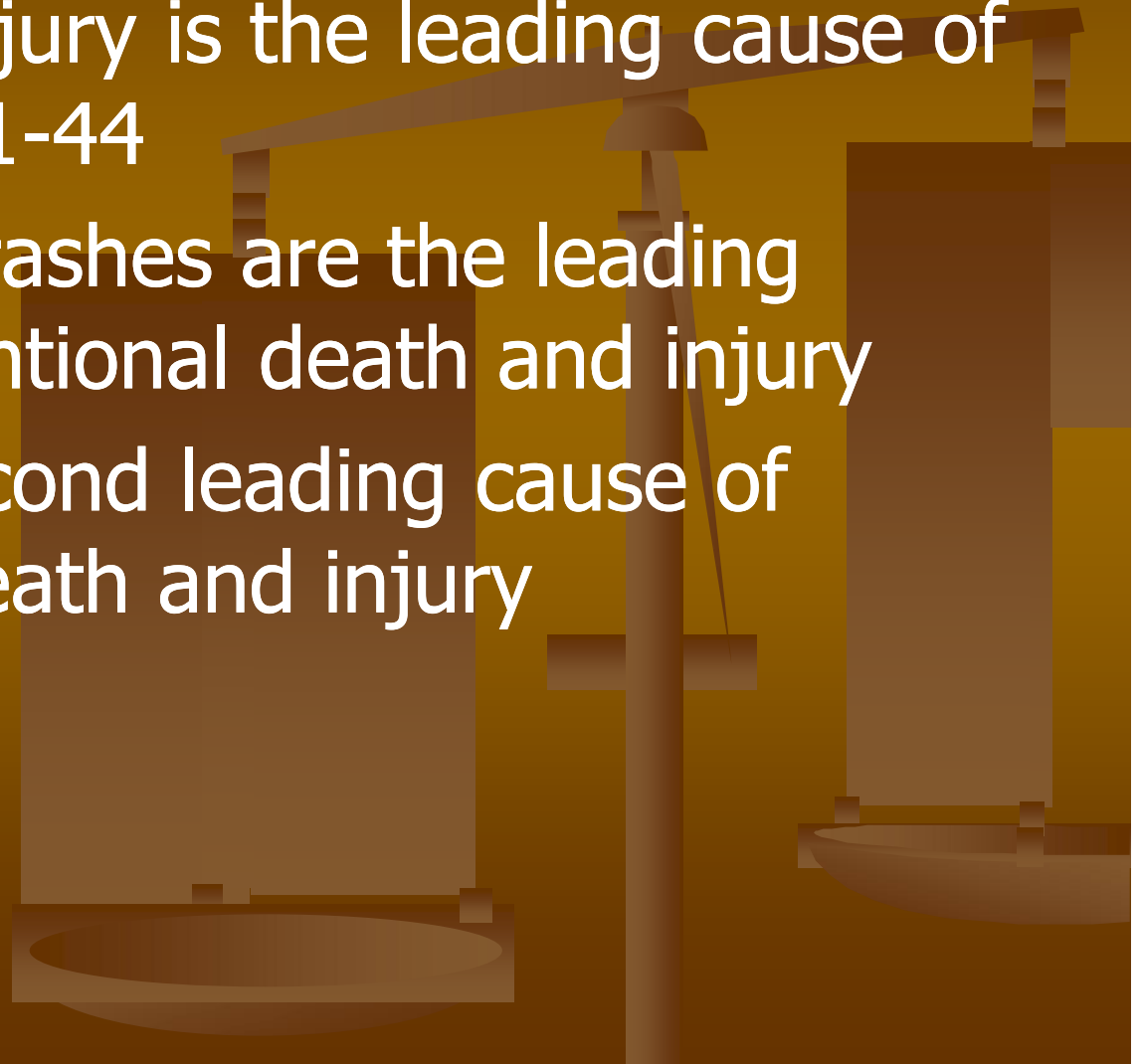
PROBLEM IDENTIFICATION

- Injuries can be unintentional or intentional
- Quantitative vs. Qualitative
- Key sources of data in Montana
 - Vital Stats
 - FARS
 - Child Death Review
 - State Trauma Registry
 - Hospital Discharge / Emergency Discharge
 - EMS Data
 - Poison Control
 - Work Comp
 - BRFSS / YRBS

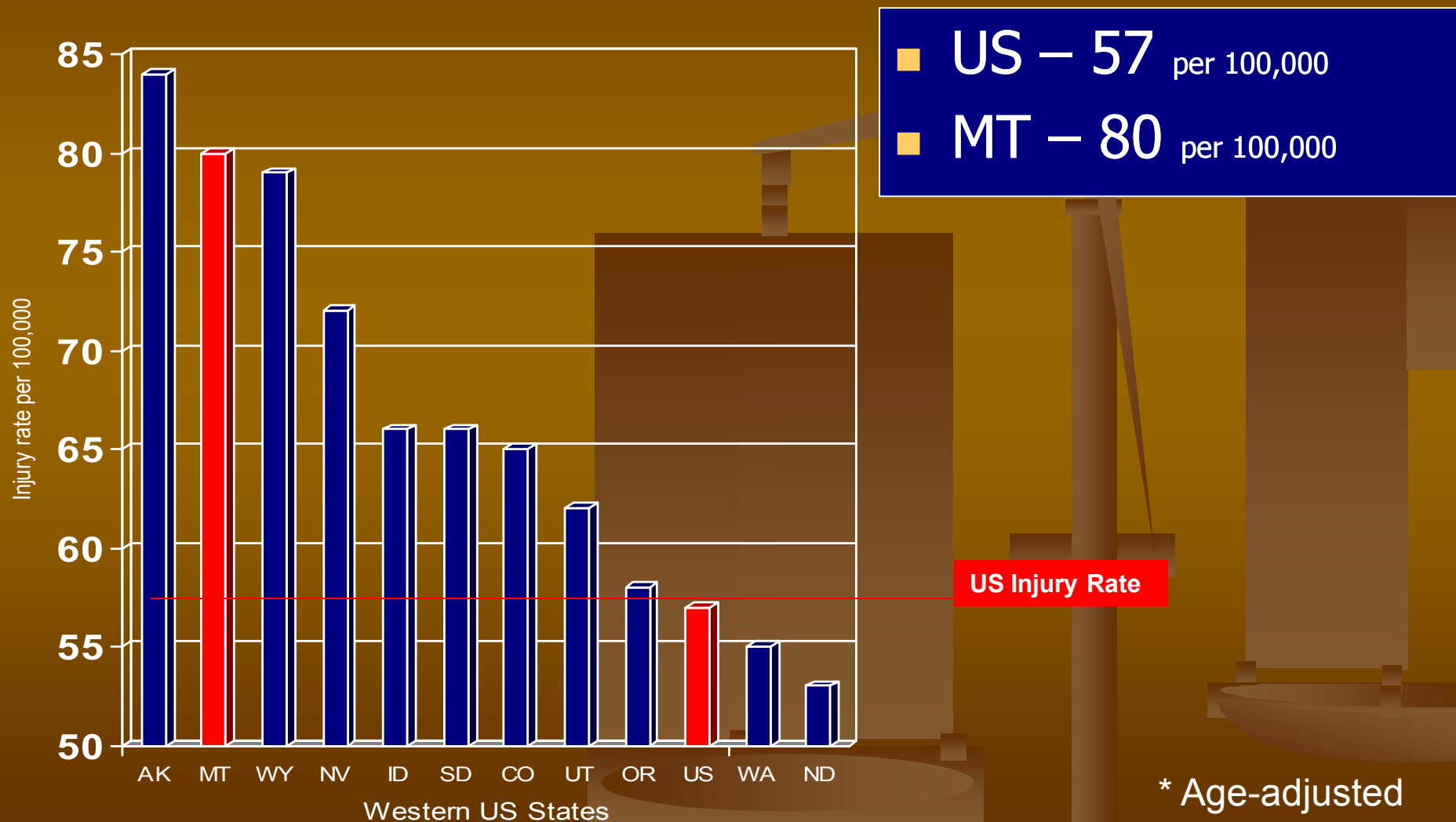


WHAT WE KNOW IN MONTANA

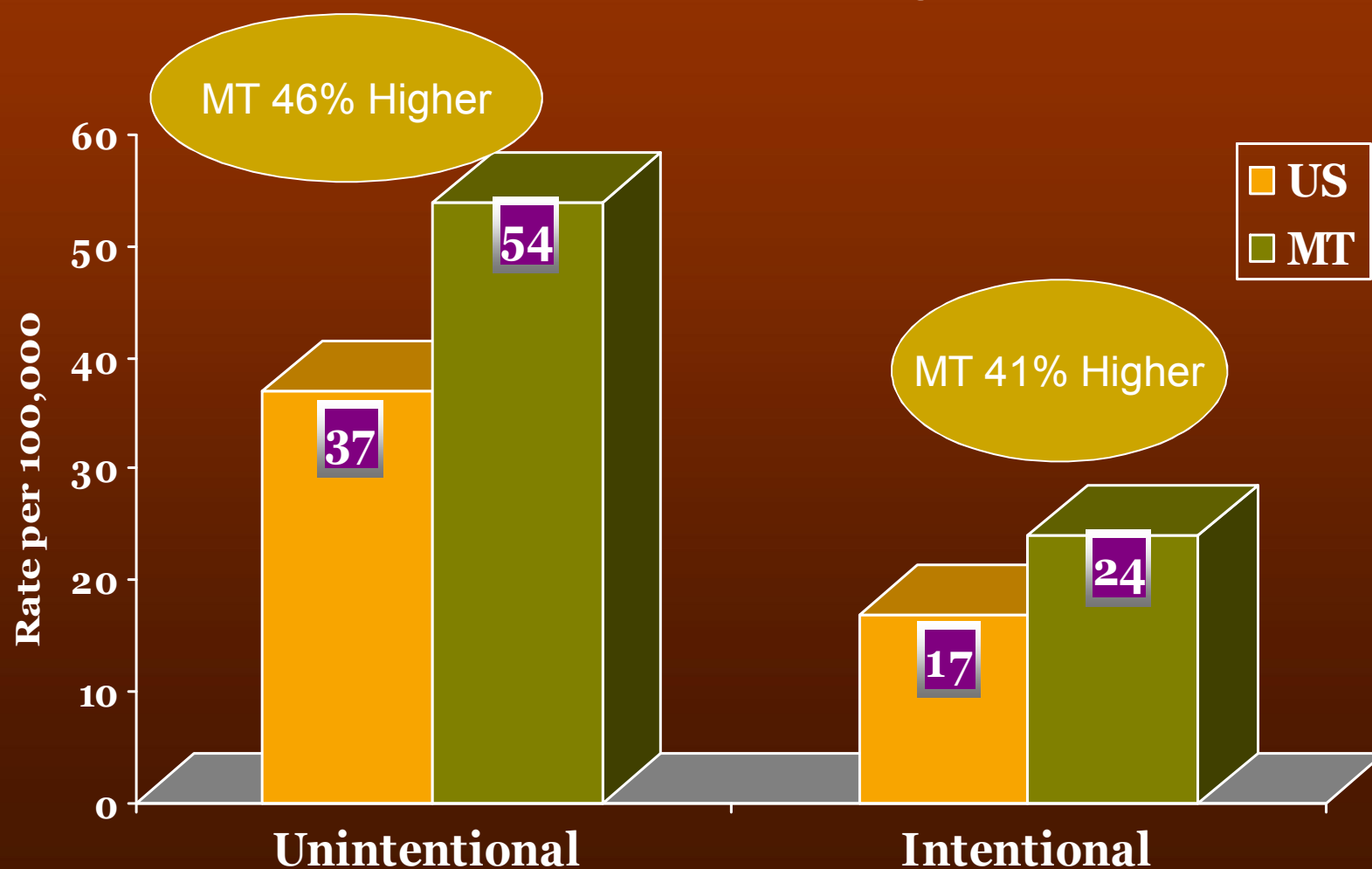
- Unintentional injury is the leading cause of death for ages 1-44
- Motor vehicle crashes are the leading cause of unintentional death and injury
- Falls are the second leading cause of unintentional death and injury



Fatal Injury Rate* on 11 Western States, 2001-2005

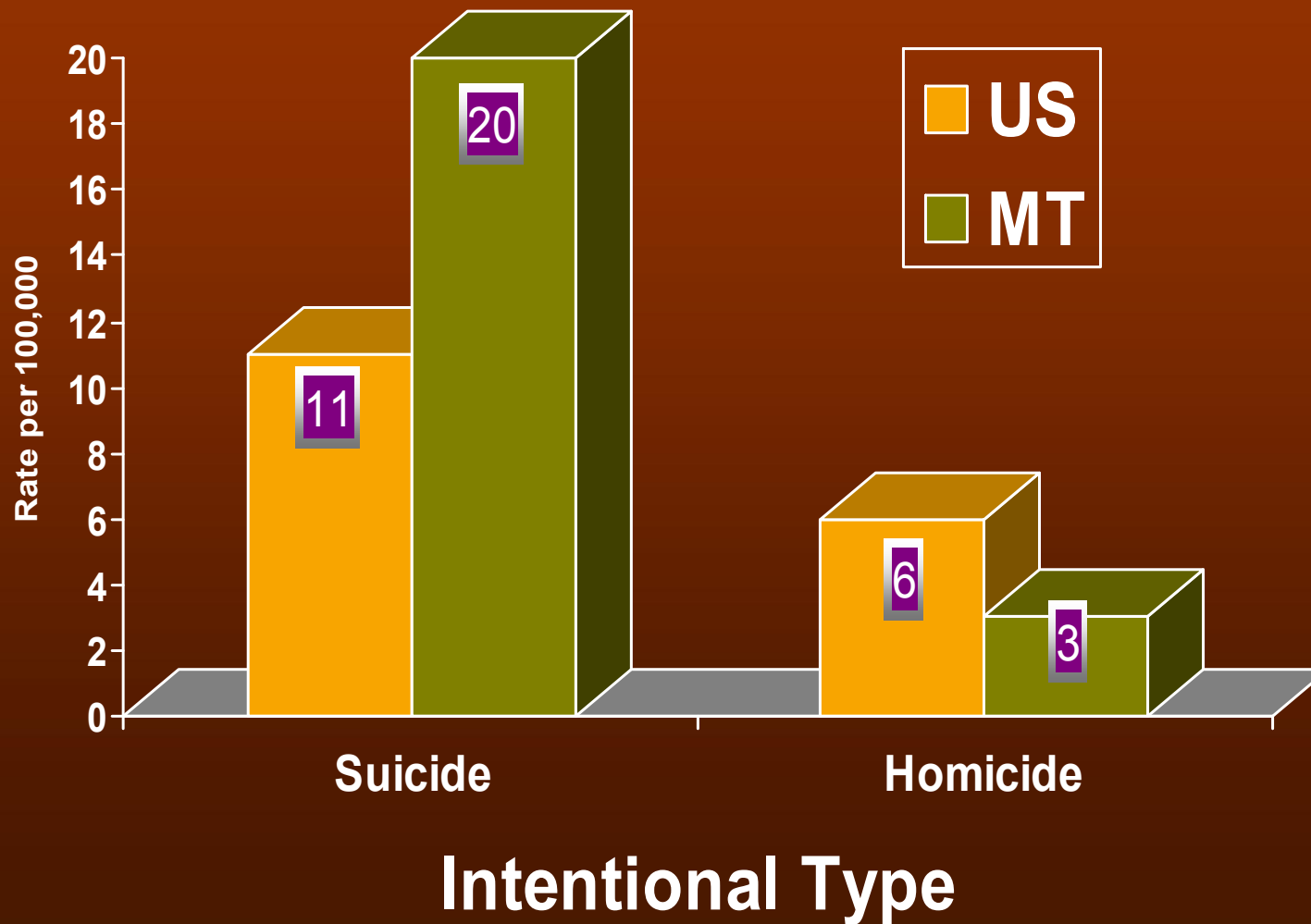


Fatal Injury Rate* by Intent of Injury, All Ages, US and MT, 2001-2005



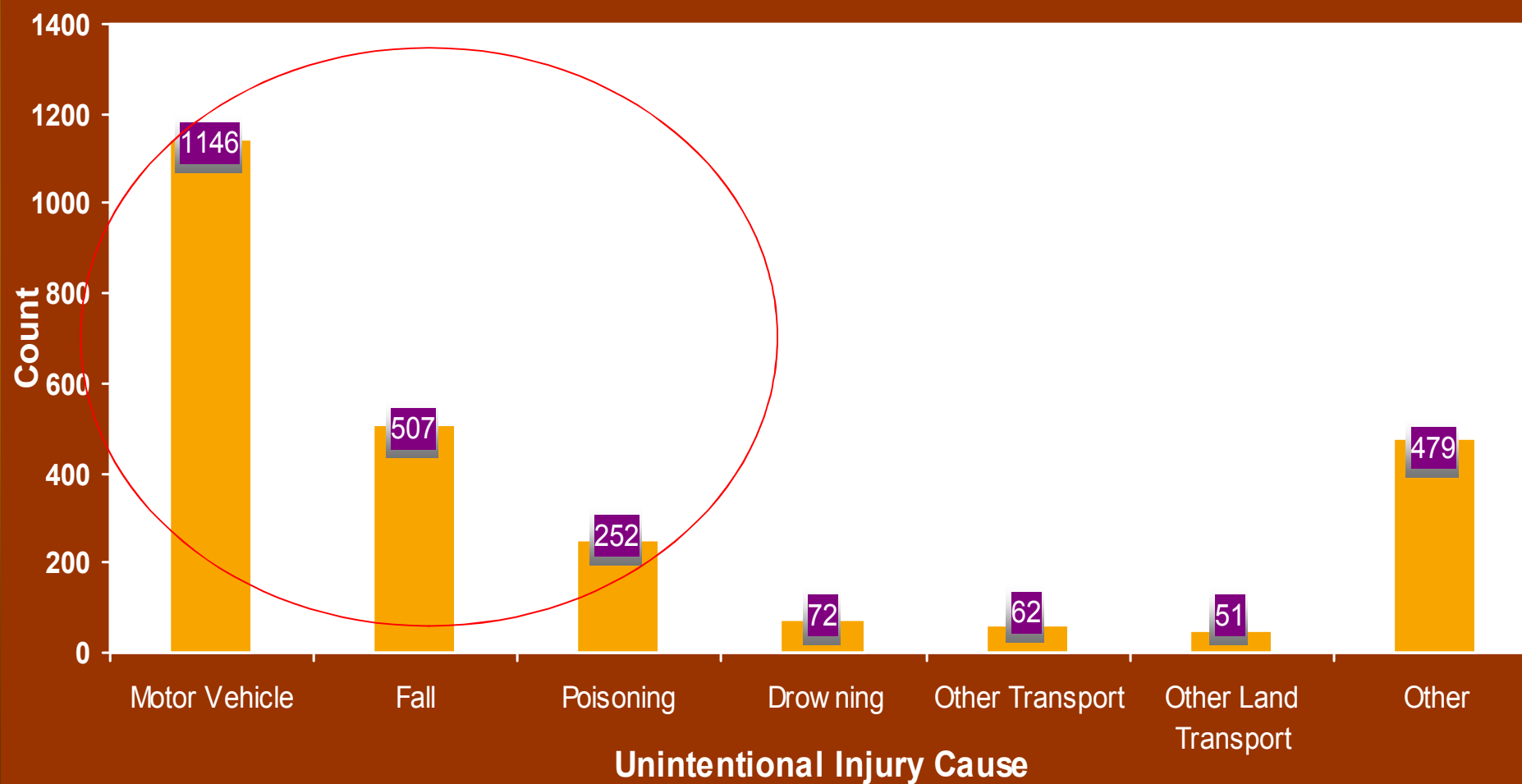
* Age-adjusted

Fatal Intentional Injury Rate*, All ages, US and MT, 2001-2005



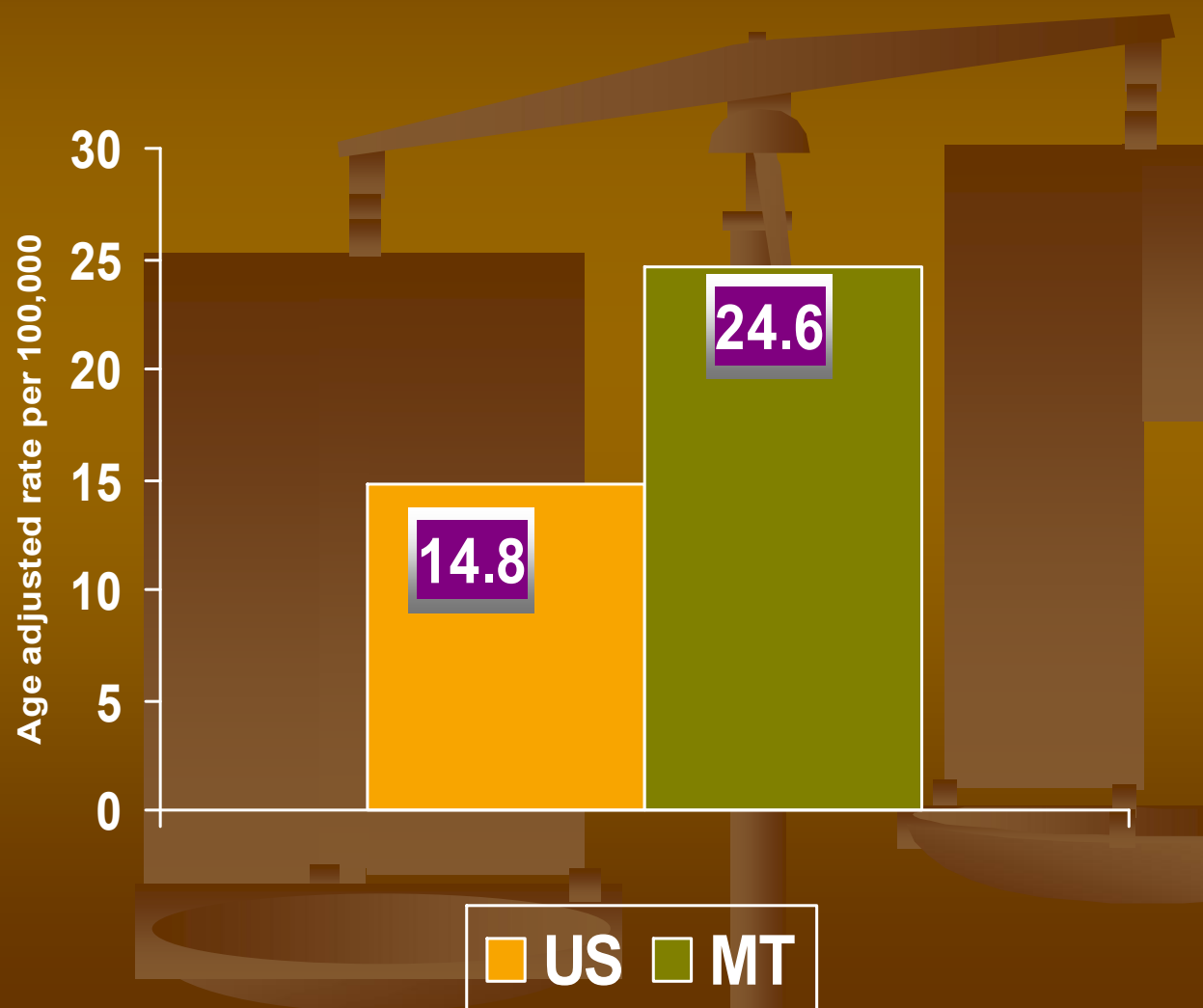
* Age-adjusted

MT Leading Causes of Fatal Unintentional Injury, 2001-2005, N= 2569



Fatal Injury Rate* for Unintentional Motor Vehicle Traffic, All Ages, MT and US, 2001 - 2005

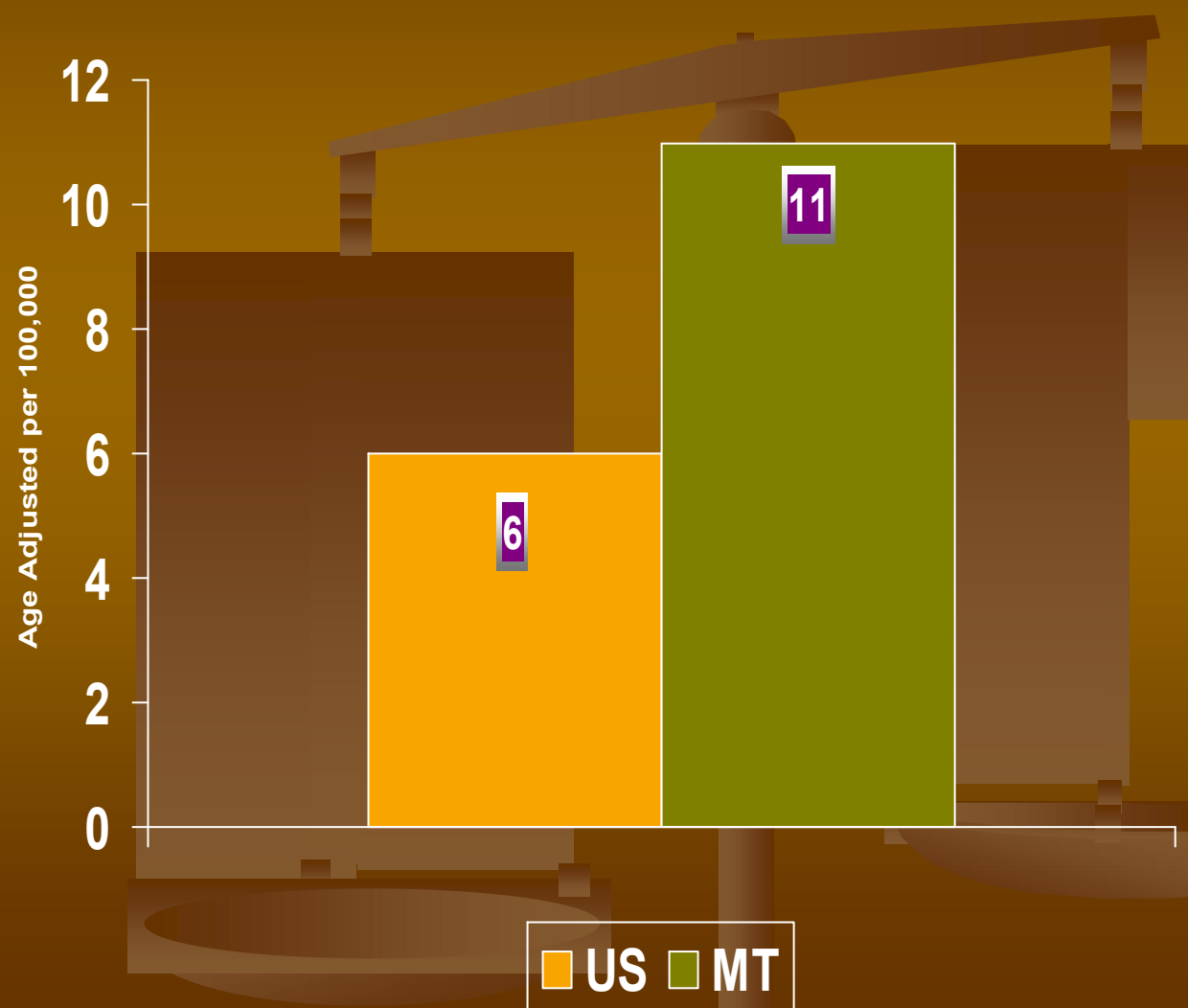
- US – 14.8
- MT – 24.6



* Age adjusted

Fatal Injury Rate* for Unintentional Falls, all ages, MT and US, 2001 – 2005

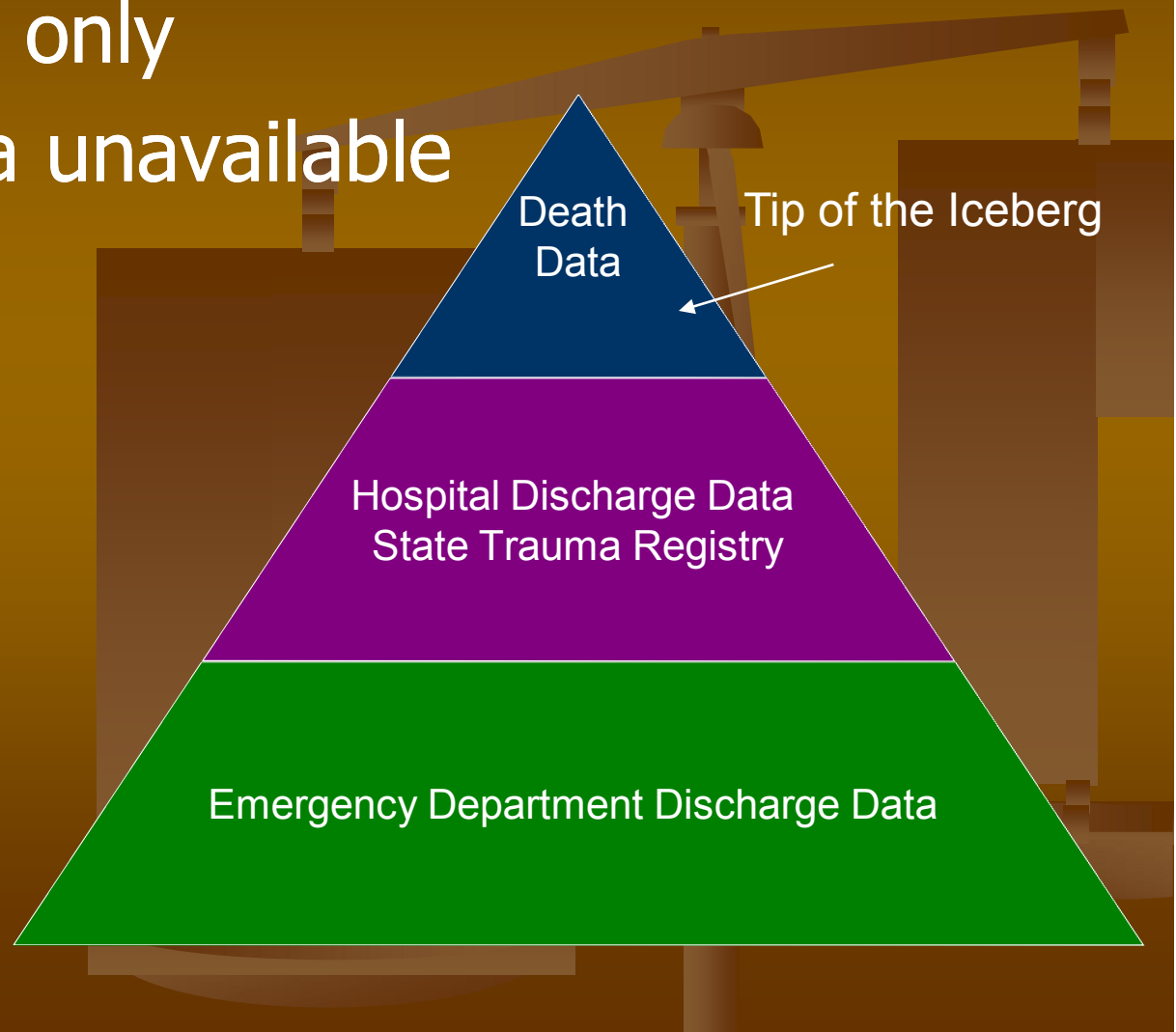
- US – 6
- MT – 11



* Age-adjusted

Data Limitations

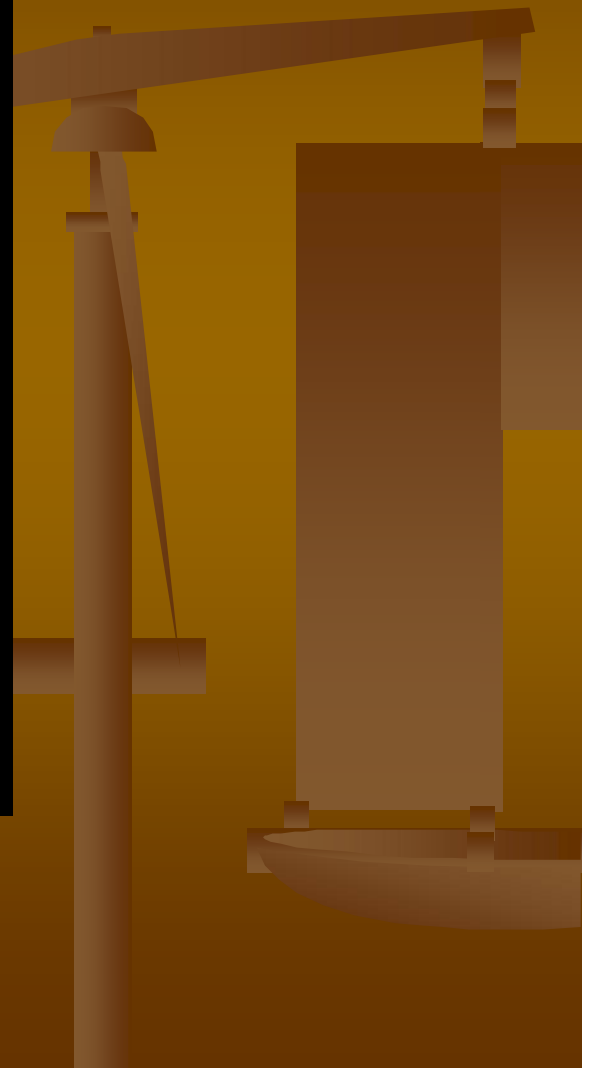
- Mortality data only
- Morbidity data unavailable or incomplete



MT Data Summary

- Unintentional Injuries are the leading cause of death for ages 1-44 years
- Motor vehicle crashes are the leading cause of unintentional injury for all ages and highest among ages 10-34 years
- Falls are the leading cause of death for ages 65 years and older
- Accidental poisoning is highest among ages 25-54 years
- Drowning is highest for ages 1-4 and 5-9 years
- ATV injury death is highest for ages 5-9 years

NOW WHAT

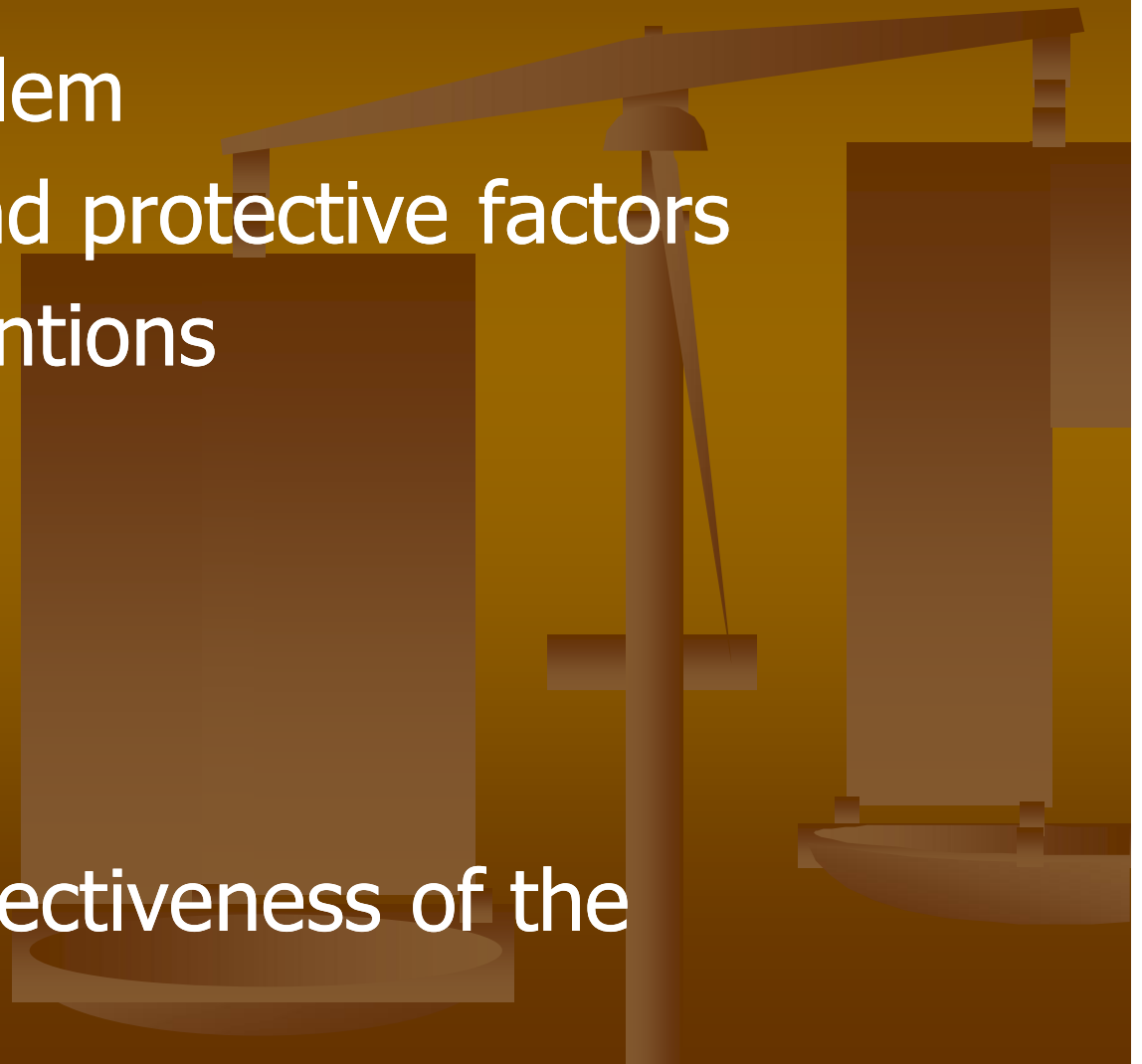


Public Health Approach

Health Care Provider's Role

Five steps:

- Define the problem
- Identify risks and protective factors
- Develop interventions
 - Education
 - Engineering
 - Legislation
- Intervene
- Evaluate the effectiveness of the interventions



Identifying the Opportunities

The Haddon Matrix

	HUMAN	VEHICLE	ENVIRONMENT
PRE-EVENT	AGE EXPERIENCE ALCOHOL DRUGS SPEED	DEFECTS BRAKES TIRES AVOIDANCE SYSTEMS	VISIBILITY PAVEMENT SIGNALS CONSTRUCTION
EVENT	BELT USE HELMET USE TOLERANCE	AIR BAG AUTOMATIC BELTS CRASH-WORTHINESS	GUARDRAILS MEDIANS BREAKAWAY POSTS
POST-EVENT	AGE PHYSICAL CONDITION	POST-CRASH FIRE FUEL LEAKS	EMS SYSTEM FIRST RESPONDER BYSTANDER CARE

Education

- Least effective
- Most used
- Examples
 - Letters to the editor
 - blogs
 - School presentations
 - Legislators
 - Church groups
- Get the Information Out
 - Accurate/factual



Examples of IP Education

- YOUR CHOICE
- Life is Hard, Play Safe
- ThinkFirst
 - Kids, youth, teens
- Trauma Nurses Talk Tough
- Call, Don't Fall



It's Your Choice

A Legacy and a Mission



It's Your Choice! _____ 2009



It's Your Choice! ————— 2009



It's Your Choice! _____ 2009

LIFE IS HARD, PLAY SAFE



A BAD COMBINATION...



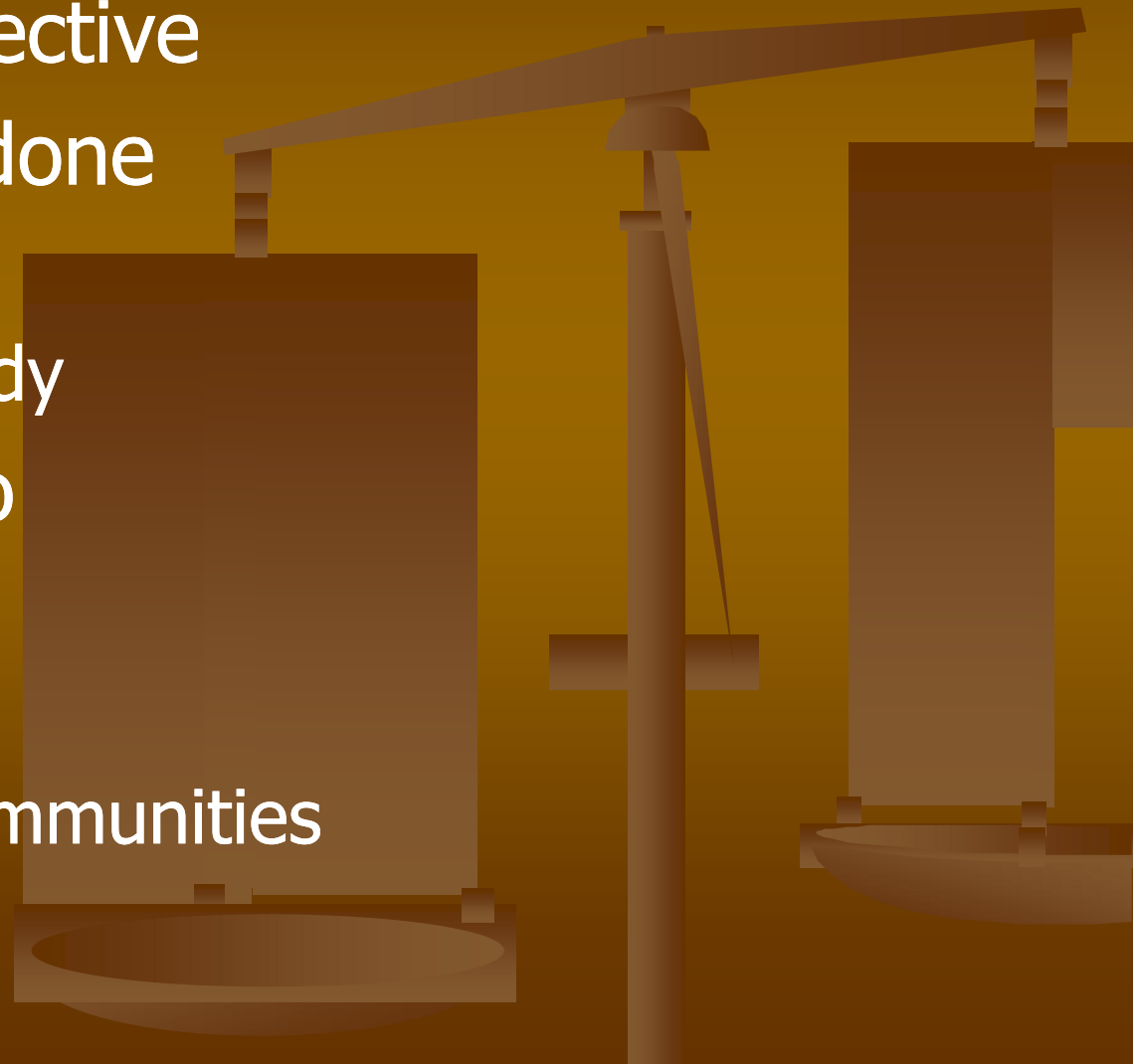
Texting + Driving = an inTEXTicated driver





Legislation

- Can be very Effective
- What we have done
 - Testify
 - Harborview study
- What we can do
 - NOT GIVE UP
 - Write letters
 - Educate our communities



Engineering

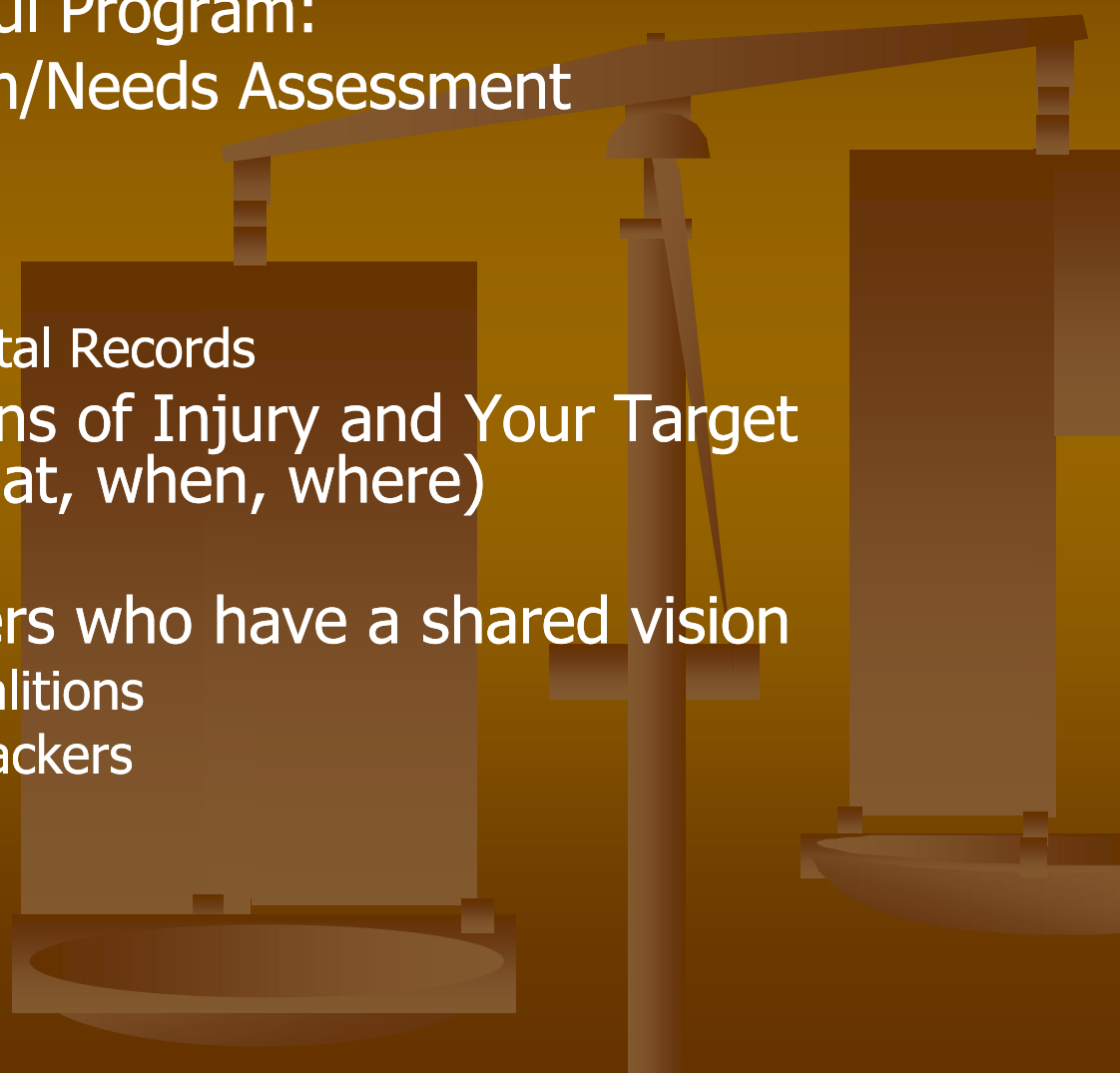
- Effective
- Health care providers role
 - Identifying issues
 - Notifying manufacurers
 - Ski helmets defect



A Successful Program

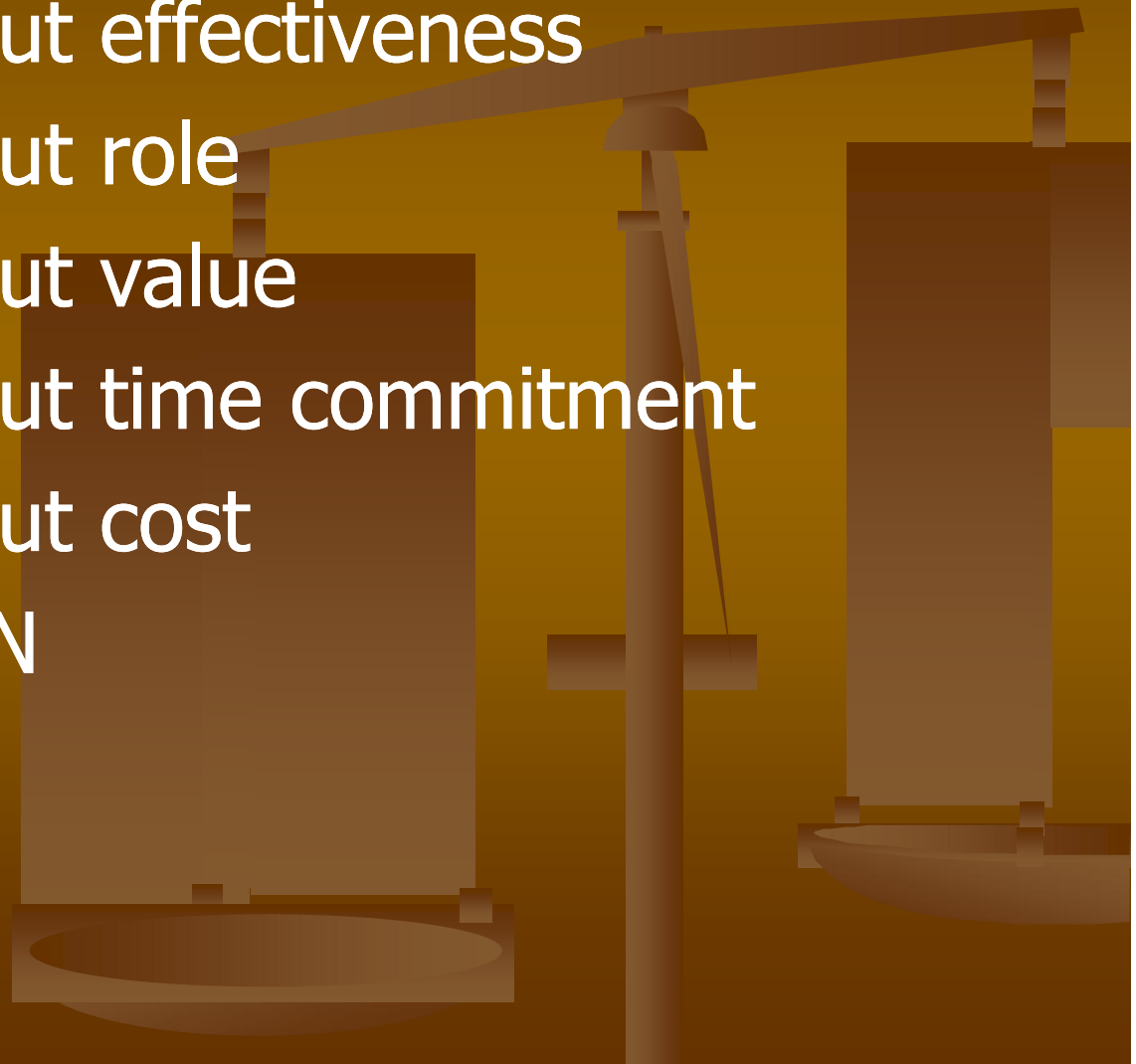
Anatomy of a Successful Program:

- Problem Identification/Needs Assessment
 - Trauma registry
 - State website
 - CDC
 - Health Department Vital Records
- Determine the patterns of Injury and Your Target Population (who, what, when, where)
 - Set goals
- Collaborate with others who have a shared vision
 - Community-based coalitions
 - Search for financial backers
 - Use the media



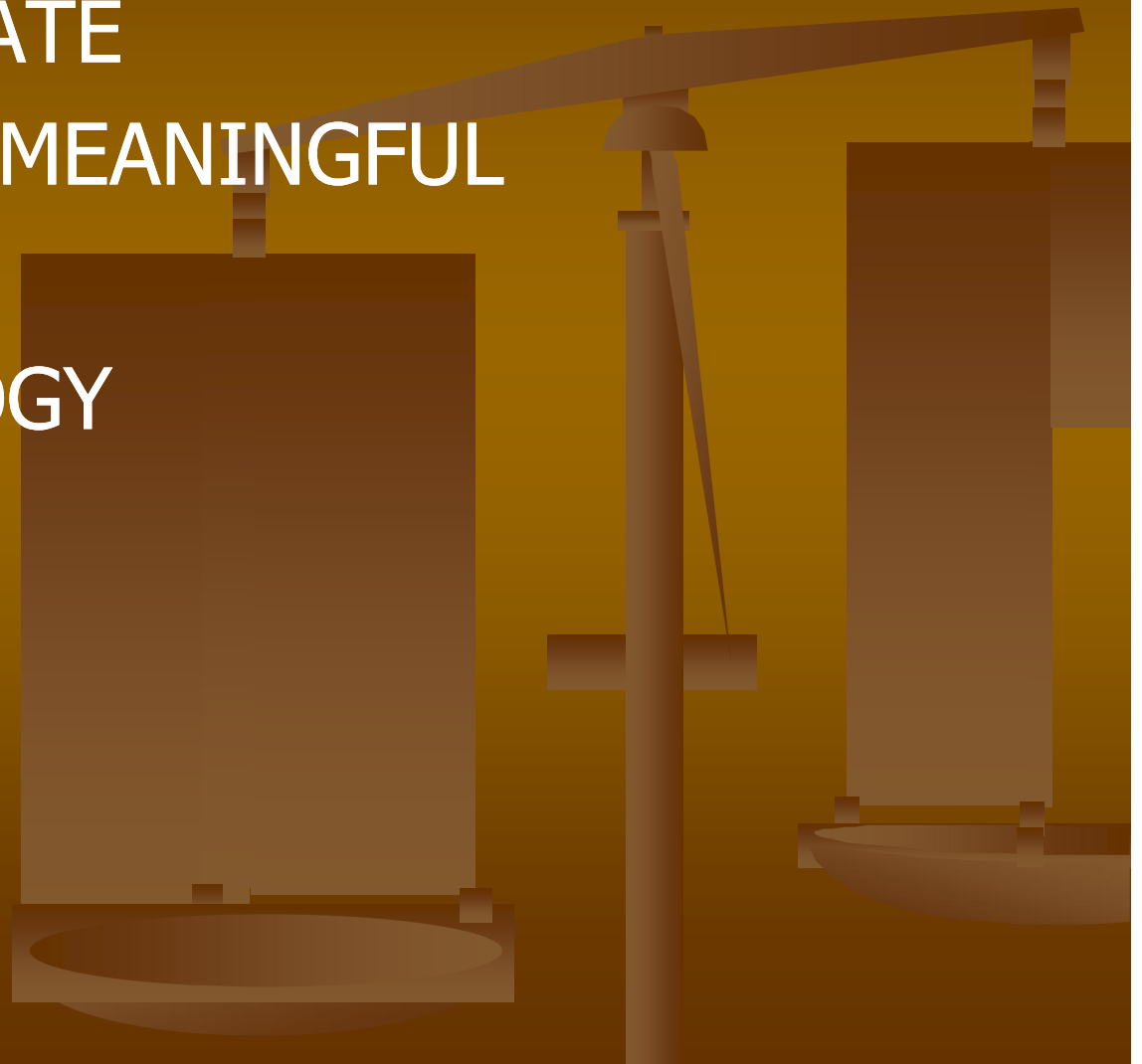
Obstacles to Participation

- Uncertainty about effectiveness
- Uncertainty about role
- Uncertainty about value
- Uncertainty about time commitment
- Uncertainty about cost
- Lack of PASSION



CONTENT DEVELOPEMENT

- AGE APPROPRIATE
- RELATIVE AND MEANINGFUL
- FLEXIBLE
- USE TECHNOLOGY
- INTERACTIVE
- PROPS



Cerebrum

- Thinking, remembering
- Feeling, deciding
- Hearing, seeing, smelling, tasting
- Doing!

Cerebellum

- Balance and walking

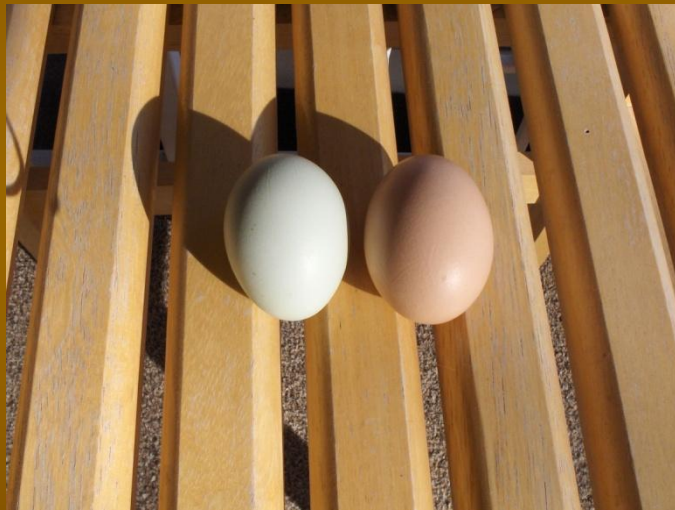
Brain Stem and Cord

- Heart beat
- Breathing
- Using arms and legs
- Going to the bathroom



LET'S PERFORM AN EXPERIMENT

WE WILL NEED TWO EGGS AND ONE BARBIE CAR.



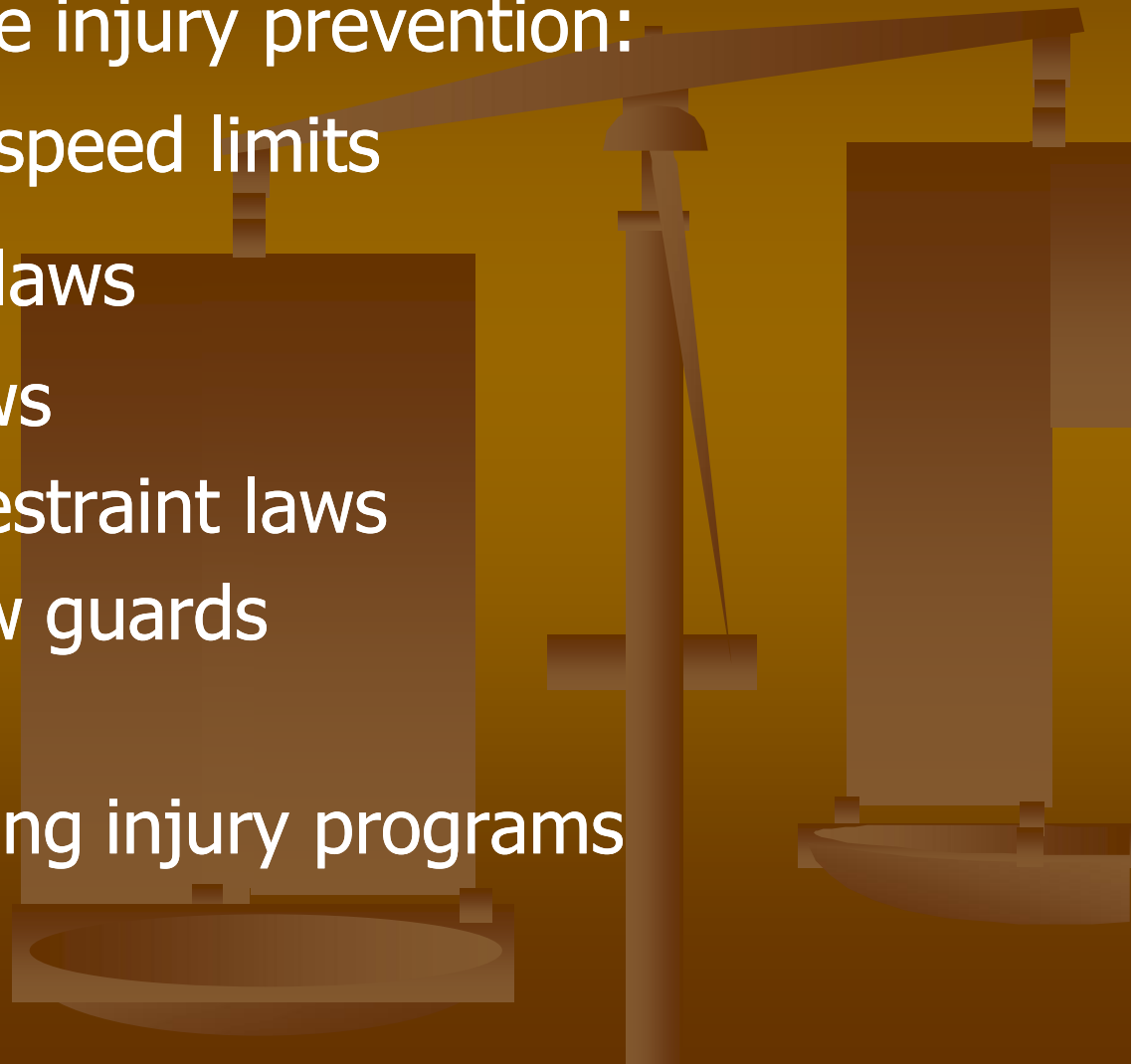
SPEED + NO SEATBELT = ???



Strategies

Examples of effective injury prevention:

- National highway speed limits
- Primary Seat belt laws
- “Cycle” helmet laws
- Child passenger restraint laws
- Apartment window guards
- Smoke detectors
- Violence/penetrating injury programs

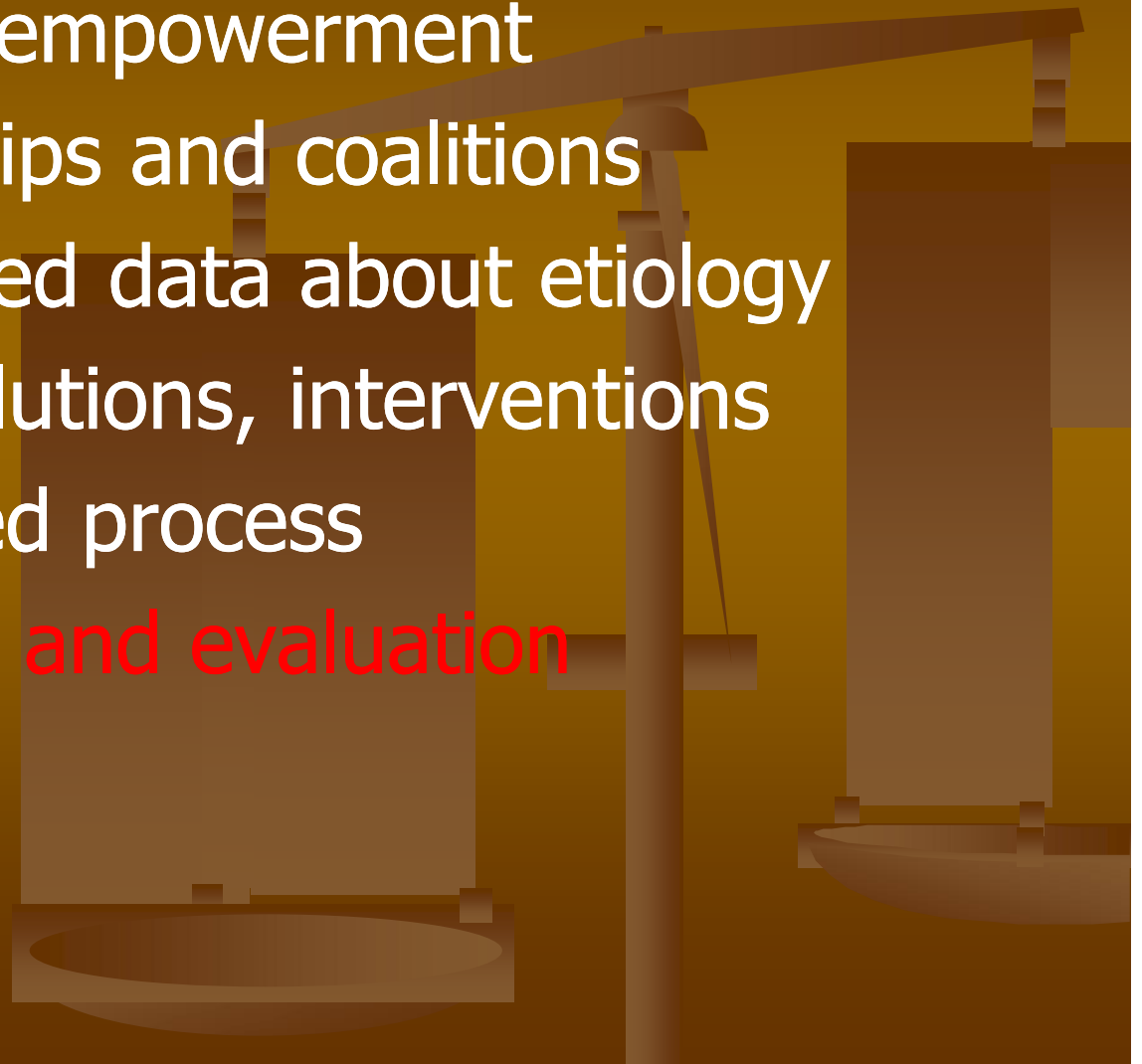


Effective Programs

- Community-based, multidisciplinary
- Public information and education
- Accurate, population-based data
- Unique, “homegrown” solutions
- Evaluation and measurement of effectiveness are essential!

Community-based Programs

- Ownership and empowerment
- Novel partnerships and coalitions
- Community-based data about etiology
- Develop/test solutions, interventions
- Consensus-based process
- **Implementation and evaluation**



Resources

- MT DPHHS Injury Prevention Program
- MT DOT Highway Traffic Safety
- MT Healthy Mothers / Healthy Babies Safe Kids Coalition
- MT Suicide Prevention
- Level II Trauma Centers
- State Injury Prevention Directors Association (STIPDA)
- Children-n-Safety
- Emergency Nurses Association
- Safe Kids World Wide
- American College of Surgeons (ACS)
- National Center for Injury Prevention and Control (NICIPC / CDC)
- Consumer Product Safety Commission
- National Highway Traffic Safety Administration (NHTSA)
- Internet Web sites—"prevention links"

DETERMINE THE OUTCOME

- Is what you are doing making a difference?
- Did it have an impact
- Go back to your goals.
 - Review
 - Reset
 - Restart
- CELEBRATE

